AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

1. (original) A projection engine comprising:

a first micro mirror having a first tilt axis disposed on a first plane;

a plurality of light sources optically coupled to the first micro mirror, and disposed along a light source axis disposed on a second plane, where the light source axis disposed on the second plane is parallel to the first tilt axis disposed on the first plane.

2. (original) The projection engine of claim 1, wherein the light sources illuminate with illumination cone angles that are expanded in a direction paralleling the first tilt axis.

3. (original) The projection engine of claim 1, wherein the light sources are primary color light sources comprising at least two of a red color light source, a blue color light source, and a green color light source.

4. (original) The projection engine of claim 1, wherein the light sources comprise at least one solid state light source.

5. (original) The projection engine of claim 4, wherein the at least one solid state light source comprises at least a selected one of a light emitting diode and a laser diode.

6. (original) The projection engine of claim 1, wherein the projection engine comprises a micro mirror device having a plurality of micro mirrors including the first micro mirror and a second micro mirror having the same first tilt axis.

7. (original) The projection engine of claim 1, wherein the projection engine comprises a micro mirror device having a plurality of micro mirrors including the first micro mirror

and a second micro mirror having a second tilt axis disposed in the first plane, where the light source axis is also parallel to the second tilt axis.

8. (original) The projection engine of claim 1, wherein the light sources are optically coupled to the first micro mirror in a non-orthogonal angular manner.

9. (original) The projection engine of claim 1, wherein the light sources directly project onto the first micro mirror.

10. (original) The projection engine of claim 1, wherein the first tilt axis is a diagonal tilt axis.

11. (original) The projection engine of claim 1, wherein the first tilt axis is a selected one of a horizontal tilt axis and a vertical tilt axis.

12. (currently amended) A projection system comprising:

a projection lens;

a micro mirror device including a plurality of micro mirrors having a plurality of parallel tilt axes disposed on a first plane; and

a plurality of light sources optically coupled to the projection lens through the micro mirror device, and disposed along a light source axis disposed on a second plane, where the light source axis is parallel to the tilt axes.

13. (original) The projection system of claim 12, wherein the plurality of light sources illuminate with illumination cone angles that are expanded in a direction paralleling the tilt axes.

14. (original) The projection system of claim 12, wherein the plurality of light sources comprise at least two of a red color light source, a blue color light source, and a green color light source.

15. (original) The projection system of claim 12, wherein the plurality of light sources comprise at least one solid state light source.

16. (original) The projection system of claim 15, wherein the at least one solid state light source comprises at least a selected one of a light emitting diode and a laser diode.

17. (original) The projection system of claim 12, wherein the plurality of light sources are optically coupled to the micro mirror device in a non-orthogonal angular manner.

18. (original) The projection system of claim 12, wherein the plurality of light sources directly project onto the micro mirrors.

19. (original) The projection system of claim 12, wherein the projection system further comprises

a processor coupled to the micro mirrors and the light sources to control the micro mirrors and the light sources to project an image; and

a digital input interface coupled to the processor to facilitate input to the processor pixel data of the image in digital form.

20. (original) The projection system of claim 19, wherein the projection system further comprises a television tuner.

21. (original) The projection system of claim 12, wherein at least one of the tilt axes is a diagonal tilt axis.

22. (original) The projection system of claim 12, wherein at least one of the first tilt axes is a selected one of a horizontal tilt axis and a vertical tilt axis.

23. (previously amended) In a projection apparatus, a method of operation comprising:

controlling a plurality of light sources disposed on a light source axis disposed on a first plane to selectively emit lights; and

controlling a plurality of micro mirrors optically coupled to the light sources to selectively tilt relative to a plurality of tilt axes to selectively reflect the lights selectively emitted by the light sources, at least one of the plurality of tilt axes being parallel with the light source axis.

24. (previously amended) The method of claim 23, wherein said controlling the plurality of light sources comprises controlling the light sources to emit lights with illumination cone angles that are expanded in a direction paralleling the tilt axes.

25. (original) The method of claim 23, wherein the method further comprises

receiving inputs for an image to be projected, in digital form; and

performing both of the controlling based at least in part on the inputs received.

26. (previously presented) The projection engine of claim 1, wherein the light sources illuminate with illumination cones that are expanded in a direction paralleling the first tilt axis.

27. (previously presented) The projection system of claim 12, wherein the plurality of light sources illuminate with illumination cones that are expanded in a direction paralleling the first tilt axis.